

REMARKS/ARGUMENTS

1. *Status of the claims*

Claims 10-17 are added. Claim 4 is amended. Claims 1 and 3-17 are pending with entry of the Amendment.

2. *Support for amendments to the claims*

Support for the amendments to the claims can be found throughout the specification, the drawings, and the claims as originally drafted. New claims 10 and 17 find support on, e.g., page 6, line 1 of the specification. New claims 11-16 are identical to claims 3-8. No new matter is added.

3. *Rejection under 35 U.S.C. § 112, second paragraph*

Claim 4 was rejected as allegedly indefinite for depending from canceled claim 2. Applicants thank the Examiner for noting this error. As amended, claim 4 only depends from claim 1. Accordingly, Applicants respectfully request withdrawal of the rejection.

4. *Rejection under 35 U.S.C. § 102*

Claims 1 and 3-6 were rejected as allegedly anticipated by Ando *et al.* Specifically, the Examiner argued that Ando *et al.* described two amplification reactions, the first reaction involving the use of completely randomized primers and the second reaction involving specific primers.

Ando *et al.* does not describe a first "amplification reaction" that comprises the use of completely randomized primers, nor is the first reaction thermocyclic. Therefore, Applicants respectfully traverse the rejection.

The Examiner asserts that the reverse transcription reaction described in Ando *et al.* is a first amplification reaction. The Examiner cites page 571, column 2, paragraph 2 and Table 2 in support of the assertion that Ando *et al.* describes "completely randomized primers" in a reverse transcription reaction. In fact, the RT-PCR primers described by Ando *et al.* are not

completely random, but instead each comprise an oligo-dT sequence, i.e., a non-random sequence. Some of the primers further comprise some additional random positions, but always contain an oligo dT sequence. Thus, the RT-PCR primers of Ando *et al.* are not completely randomized. Indeed, Table 2 is not a listing of random primers, but instead are specific primers used by Ando *et al.* to reverse transcribe specific transcripts.

Moreover, the entire design of Ando *et al.* is for the purpose of generating sequences from a specific 3 kb region of a genome. For example, the specific primer sequences described in Table 2 are for the purpose of amplifying specific sequences within the 3 kb region. In contrast, the present invention first amplifies sequences in a completely random fashion, without regard to what particular sequences are amplified. Thus, Ando *et al.* does not teach or even suggest the claimed methods.

Furthermore, claim 1 states that the method comprises a first and second thermocyclic amplification reaction. Page 4, lines 23-24 of the present specification states: "Each thermal cycle comprises a denaturing phase, an annealing phase, and at least one elongation phase."

While it is not clear whether a reverse transcription reaction is an "amplification reaction" of any sort, it is very clear that it is not thermocyclic. Page 572, column 1, paragraph 1 of Ando *et al.* states that there was "one cycle of RT at 50° C for 10 min, followed by a denaturation at 94° C for 2 min" and then "40 amplification cycles." It is not clear what makes a "RT cycle", but it is clear from the conditions described that it was not a thermocyclic cycle since the temperature did not change.

Since Ando *et al.* does not anticipate claim 1, the reference cannot anticipate any claims dependent therefrom. Accordingly, Applicants respectfully request withdrawal of the rejection.

5. *Rejection under 35 U.S.C. § 103*

A. *Rejection of claims 7-8*

Claims 7-8 were rejected as allegedly obvious over Ando *et al.* in view of von Eggeling *et al.* The Examiner argued that Ando *et al* allegedly described all of the limitations of

claim 1, but did not describe protease treatments. However, the Examiner stated that von Eggeling *et al.* could be combined with Ando *et al.* to render the use of protease treatments with the method of claim 1 obvious. Applicants respectfully traverse the rejection.

As discussed above, Ando *et al.* does not in fact describe all of the elements of claim 1. von Eggeling *et al.* was cited by the Examiner as describing detection of length polymorphisms in nucleated cells using Proteinase K. The addition of Proteinase K alone does not cure the above-described defects in Ando *et al.* Accordingly, the combination of the two references does not render either claim 1 or claims 7-8 obvious. Withdrawal of the rejection is respectfully requested.

B Rejection of claim 9

Claim 9 was rejected as allegedly obvious over Ando *et al.* in view of Casas *et al.* The Examiner argued that Ando *et al* allegedly described all of the limitations of claim 9 except primer extension with increased temperatures in at least some successive amplification cycles. However, the Examiner stated that Casas *et al.* could be combined with Ando *et al.* to render the use of increased successive extension temperatures obvious. Applicants respectfully traverse the rejection.

As discussed above with reference to claim 1, Ando *et al.* does not describe a first "amplification reaction" that comprises the use of completely randomized primers, nor is the first reaction thermocyclic. Casas *et al.* was cited by the Examiner as describing amplification in which at least some successive extension cycles are performed at an increased temperature. The addition of increased successive extension temperatures does not cure the above-described defects in Ando *et al.* Accordingly, the combination of the two references does not render claim 9 obvious. Withdrawal of the rejection is respectfully requested.

Appl. No. 10/087,082
Amtd. dated February 9, 2004
Reply to Office Action of October 20, 2003

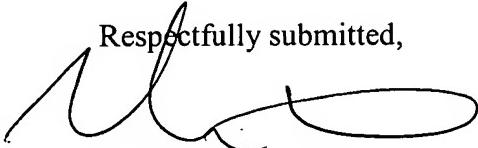
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CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,



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